Data sheet

6ES7505-0RA00-0AB0



SIMATIC S7-1500, System power supply PS 60W 24/48/60 V DC, supplies the backplane bus of the S7-1500 with operating voltage

Product type designation PS 60 W 24/48/60 V DC HM functional status F803 Firmware version V10.0 Engineering with V10.0 Engineering with V10.0 Engineering with V12 / V12 STEP 7 TIA Portal configurable/integrated from version V12 / V12 STEP 7 configurable/integrated from version V12 / V12 Step 1 V10.0 Engineering with V12 / V12 Step 2 V10.0 Engineering with V12 / V12 Step 3 V12 / V12 Step 3 V12 / V12 Step 4 V16 V10 Engineering with V12 / V12 Step 4 V16 V10 Enterties V12 / V12 V13 Enterties V12 / V12 V13 Enterties V12 / V13	Consuel information	
FROM Firmware version F	General information	DO AN WALLANDA VIDA
Firmware version V1.0.0 Engineering with		
Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version Installation type/mounting Rail mounting Rail mounting Supply voltage Supply voltage Railed value (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, upper limit (DC		
STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version V5.5 SP3 or higher Installation type/mounting Rail mounting Rail mounting Rail mounting Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Yes Short-circuit protection Pes Mains buffering Nains voltage failure stored energy time Public value at 24 V DC Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC Output curront Short-circuit protection Yes Power Infeed power to the backplane bus Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Isolation tested with 2 500 V DC/2 s (routine test) Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation tested with 2 500 V DC/2 s (routine test) Yes; Static No.2-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge sym		V1.0.0
• STEP 7 configurable/integrated from version Installation type/mounting Rail mounting Rail mounting Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Yes Short-circuit protection Alains butfering • Mains/voltage failure stored energy time 20 ms Input current Rated value at 24 V DC Rated value at 48 V DC Roterioriuit protection Yes Power loss Power loss Power loss at nominal rating conditions Infeed power to the backplane bus Power loss at nominal rating conditions Status indicator Pose so at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge • Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge symm.), no external protective circuit required Degree and class of protection IP degree of protection IP20		
Rail mounting Yes Supply voltage Rated value (DC) 24 V / 48 V / 60 V permissible range, lower limit (DC) 19.2 V; Static 19.2 V, dynamic 18.5 V permissible range, upper limit (DC) 72 V; Static 72 V, dynamic 75.5 V Reverse polarity protection Yes Short-circuit protection Yes Alains/voltage failure stored energy time 20 ms Input current Rated value at 24 V DC 3.A Rated value at 48 V DC 1.5 A Rated value at 60 V DC 1.2 A Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions 12 W Interrupts/dagnostics/status Information Status indicator Yes Potential separation primary/secondary Isolation tested with 2.50 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge symm.), no external protective circuit required Pegree of protection IP 20		
Rail mounting Yes Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Reverse polarity protection Mains buffering Mains/voltage failure stored energy time Do mains/voltage failure stored energy time All Care Advance at 48 V DC As a A Rated value at 24 V DC As A Rated value at 60 V DC Utput current Short-circuit protection Yes Power Infeed power to the backplane bus Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation Isolation tested with Letter ference immunity against voltage surge Interference immunity against voltage surge Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree of protection IP 20		V5.5 SP3 or higher
Rated value (DC)		
Rated value (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Yes Short-circuit protection Mains buffering • Mains/voltage failure stored energy time Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Protential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with EMC Interference immunity against voltage surge • Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), +2 kV (acc. to IEC 61000-4-5; 1995; surge symm.), no external protective circuit required Degree and class of protection IP degree of protection IP degree of protection		Yes
permissible range, lower limit (DC) permissible range, upper limit (DC) Reverse polarity protection Reverse polarity protection Yes Short-circuit protection Mains buffering • Mains/voltage failure stored energy time Disput current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC Reverse polarity protection Rated value at 60 V DC Rated value at 60 V DC Reverse polarity protection Reverse polarity protection Rated value at 60 V DC Rated value at 60 V DC Reverse polarity protection R	Supply voltage	
permissible range, upper limit (DC) Reverse polarity protection Yes Short-circuit protection Alains buffering • Mains/voltage failure stored energy time 10 mg • Mains/voltage failure stored energy time 20 ms Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC 1.5 A Rated value at 60 V DC 1.2 A Coutput current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge • Interference immunity against voltage surge • Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection	Rated value (DC)	24 V / 48 V / 60 V
Reverse polarity protection Short-circuit protection Mains buffering • Mains/voltage failure stored energy time • Mains/voltage failure stored energy time 20 ms Input current Rated value at 24 V DC Rated value at 80 V DC Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge • Interference immunity an supply lines acc. to IEC 61000- 4-5 Degree and class of protection IP degree of protection IP degree of protection IP 20	permissible range, lower limit (DC)	19.2 V; Static 19.2 V, dynamic 18.5 V
Short-circuit protection Yes Mains buffering Mains/voltage failure stored energy time 20 ms Input current Rated value at 24 V DC 3. A Rated value at 48 V DC 1.5 A Rated value at 60 V DC 1.2 A Output current Short-circuit protection Yes Power Ioss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge A Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge symm.), no external protective circuit required Degree and class of protection IP20	permissible range, upper limit (DC)	72 V; Static 72 V, dynamic 75.5 V
Mains buffering Mains/voltage failure stored energy time 20 ms Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC 1.5 A Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity and supply lines acc. to IEC 61000- 4-5 Degree and class of protection IP degree of protection	Reverse polarity protection	Yes
Mains/voltage failure stored energy time Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge • Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP degree of protection IP 20	Short-circuit protection	Yes
Input current Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP degree of protection IP 20	Mains buffering	
Rated value at 24 V DC Rated value at 48 V DC Rated value at 60 V DC 1.5 A Rated value at 60 V DC 1.2 A Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge • Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP degree of protection	Mains/voltage failure stored energy time	20 ms
Rated value at 48 V DC Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), +2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP20	Input current	
Rated value at 60 V DC Output current Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Isolation Isolation Isolation Isolation Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP degree of protection	Rated value at 24 V DC	3 A
Short-circuit protection Yes Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions 12 W Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection	Rated value at 48 V DC	1.5 A
Short-circuit protection Power Infeed power to the backplane bus 60 W Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP degree of protection IP degree of protection IP degree of protection	Rated value at 60 V DC	1.2 A
Infeed power to the backplane bus Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Potential separation primary/secondary Isolation Isolation Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP 20	Output current	
Infeed power to the backplane bus Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Potential separation primary/secondary Isolation Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge ● Interference immunity on supply lines acc. to IEC 61000- 4-5 Degree and class of protection IP degree of protection 12 W	Short-circuit protection	Yes
Power loss Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Yes Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000- 4-5 Degree and class of protection IP degree of protection IP 20 IP 20	Power	
Power loss at nominal rating conditions Interrupts/diagnostics/status information Status indicator Potential separation primary/secondary Pos; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP20	Infeed power to the backplane bus	60 W
Interrupts/diagnostics/status information Status indicator Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000- 4-5 Pegree and class of protection IP degree of protection IP20	Power loss	
Status indicator Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP20	Power loss at nominal rating conditions	12 W
Potential separation primary/secondary Yes; Electrical isolation for 230 V AC (reinforced isolation) Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP20	Interrupts/diagnostics/status information	
primary/secondary Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required Degree and class of protection IP degree of protection IP20	Status indicator	Yes
Isolation Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000- 4-5 Degree and class of protection IP degree of protection IP20	Potential separation	
Isolation tested with 2 500 V DC/2 s (routine test) EMC Interference immunity against voltage surge Interference immunity on supply lines acc. to IEC 61000- 4-5 Pegree and class of protection IP degree of protection IP20	primary/secondary	Yes; Electrical isolation for 230 V AC (reinforced isolation)
Interference immunity against voltage surge • Interference immunity on supply lines acc. to IEC 61000- 4-5 Pegree and class of protection IP degree of protection IP20	Isolation	
Interference immunity against voltage surge ● Interference immunity on supply lines acc. to IEC 61000- 4-5 Pegree and class of protection IP degree of protection IP20 Interference immunity against voltage surge Yes; ±1 kV (acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required	Isolation tested with	2 500 V DC/2 s (routine test)
Interference immunity on supply lines acc. to IEC 61000- 4-5 Pegree and class of protection IP degree of protection Yes; ±1 kV (acc. to IEC 61000-4-5; 1995; surge symm.), ±2 kV (acc. to IEC 61000-4-5; 1995; surge asymm.), no external protective circuit required IP20	EMC	
Interference immunity on supply lines acc. to IEC 61000- 4-5 Pegree and class of protection IP degree of protection Yes; ±1 kV (acc. to IEC 61000-4-5; 1995; surge symm.), no external protective circuit required IP20 IP20	Interference immunity against voltage surge	
Degree and class of protection IP degree of protection IP20		
IP degree of protection IP20		o 1000 1 0, 1000, ourgo doynim., no oxioniai protoctivo oirodit requiled
		IP20
	Equipment protection class	I, with protective conductor

Dimensions	
Width	70 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	600 g

last modified:

8/8/2023